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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 09:22:37 ON 01 JUL 2002
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FILE COVERS 1907 - 1 Jul 2002  VOL 137 ISS 1
FILE LAST UPDATED: 30 Jun 2002  (20020630/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

CAS roles have been modified effective December 16, 2001. Please
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information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> d his

     (FILE 'HOME' ENTERED AT 08:52:46 ON 01 JUL 2002)

     FILE 'REGISTRY' ENTERED AT 08:52:58 ON 01 JUL 2002
               E POLYURETHANE/PCT
L1         60391 S E3
L2         55489 S L1 AND N>=1
L3          5497 S L1 AND N>=4

     FILE 'HCAPLUS' ENTERED AT 09:00:31 ON 01 JUL 2002
L4            23 S L3 (L) (THICKEN? OR SIZ?)
L5             7 S L3 (L) (THICKEN? OR SIZING OR SIZER?)
L6            36 S MOUGIN N?/AU
L7            25 S COTTARD F?/AU
L8             1 S L6 AND L7

     FILE 'REGISTRY' ENTERED AT 09:08:57 ON 01 JUL 2002

     FILE 'HCAPLUS' ENTERED AT 09:09:09 ON 01 JUL 2002
L9                TRA L8 1 RN :        7 TERMS

     FILE 'REGISTRY' ENTERED AT 09:09:14 ON 01 JUL 2002
L10            7 SEA L9

     FILE 'HCAPLUS' ENTERED AT 09:14:29 ON 01 JUL 2002

     FILE 'REGISTRY' ENTERED AT 09:14:30 ON 01 JUL 2002

     FILE 'HCAPLUS' ENTERED AT 09:17:20 ON 01 JUL 2002
L11           35 S POLYURETHANE# (L) (THICKEN? OR GELATION OR GELLING OR SIZING
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Searched polyurethanes having at least 4 nitrogens in polymer class field and carried over to HCAPLUS.

Hits were linked with a thickener, sizing, or sizers

Search authors' work for indexing

Transferred registry numbers from author's work to registry to examine compounds

Searched using indexing of authors' work

Search completed by David Schreiber 308-4292

L12 42 S L11 OR L5

FILE 'HCAPLUS' ENTERED AT 09:22:37 ON 01 JUL 2002

=> d ibib abs hitstr l12 tot

L12 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:391480 HCAPLUS
DOCUMENT NUMBER: 136:390756
TITLE: Composition for treating keratinous materials comprising a cationic associative polyurethane polymer and a protecting or conditioning agent
INVENTOR(S): Cottard, Francois; De la Mettrie, Roland
PATENT ASSIGNEE(S): L'Oreal, Fr.
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002039964	A1	20020523	WO 2001-FR3426	20011106
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2816834	A1	20020524	FR 2000-14949	20001120

PRIORITY APPLN. INFO.: FR 2000-14949 A 20001120

AB The invention concerns a compn. for treating keratinous fibers, in particular human keratinous fibers such as hair, comprising in a physiol. acceptable medium, at least a protecting or conditioning agent, and further at least a cationic associative polyurethane polymer. The invention also concerns dyeing methods and devices using said compn. A shampoo contained ethoxylated sodium lauryl sulfate 17, 30% cocoylbetaine 2.5, cationic polymer 1.0, copra acid monisiopropanolamide 2-hydroxy-4-methoxybenzophenone-5-sulfonic acid, perfume and preservatives q.s., and water q.s. 100 g.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:368279 HCAPLUS
DOCUMENT NUMBER: 136:374516
TITLE: Composition for bleaching or permanent waving of keratinous fibers comprising a cationic associative polyurethane
INVENTOR(S): Legrand, Frederic; De la Mettrie, Roland
PATENT ASSIGNEE(S): L'oreal, Fr.
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002038118	A1	20020516	WO 2001-FR3430	20011106
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2816210	A1	20020510	FR 2000-14321	20001108

PRIORITY APPLN. INFO.: FR 2000-14321 A 20001108
OTHER SOURCE(S): MARPAT 136:374516

AB The invention concerns bleaching compns. for keratinous fibers, in particular human keratinous fibers and more particularly hair, comprising, in a medium suitable for bleaching or permanent waving, at least a reducing agent and furthermore at least a cationic associative polyurethane. The invention also concerns the bleaching or permanent waving method and devices using said compn. A hair bleach contained citric acid 7.4, trisodium citrate dihydrate 1, hydroxyethyl cellulose 1.5, 2-oxoglutaric acid 0.8, sodium ascorbate 5.7, L-cysteine 2, cationic polyurethane 0.3, magnesium sulfate 1, and water q.s. 100 g.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:368275 HCAPLUS
DOCUMENT NUMBER: 136:374514
TITLE: Oxidation dyeing composition for keratinous fibers comprising a cationic associative polyurethane
INVENTOR(S): Cottard, Francois; De la Mettrie, Roland
PATENT ASSIGNEE(S): L'oreal, Fr.
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002038116	A1	20020516	WO 2001-FR3428	20011106
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2816207	A1	20020510	FR 2000-14319	20001108

PRIORITY APPLN. INFO.: FR 2000-14319 A 20001108
OTHER SOURCE(S): MARPAT 136:374514

AB The invention concerns an oxidn. dyeing compn. for keratinous fibers, in particular for human keratinous fibers and more particularly hair, comprising, in a medium suitable for dyeing, at least an oxidn. coloring agent, and furthermore at least a cationic associative polyurethane. The invention also concerns dyeing methods and devices using said compn. A hair dye contained ethoxylated fatty alc. 32.5, oleic acid 2, oleic alc. 1.8, fatty amide 4, glycerin 3, 60% cationic polymer 1.2, Merquat-280 2, sequestering agent q.s., reducing agent q.s., 20% ammonia 8, paraphenylenediamine 0.324, 2-methyl-4-aminophenol 0.369, a cationic polyurethane 1.0, and water q.s. 100 g. At the time of use the dye compn. is mixed with equal amt. of oxidant compn. (formulation given) at a ratio of 1:1.5 and applied on the hair. The hair was then rinsed with water after 30 min, washed with shampoo, rinsed with water and dried to give a strong purple-red color.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:368274 HCAPLUS
DOCUMENT NUMBER: 136:374513
TITLE: Direct dyeing composition for keratinous fibers comprising a cationic associative polyurethane
INVENTOR(S): Cottard, Francois; De la Mettrie, Roland
PATENT ASSIGNEE(S): L'oreal, Fr.
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002038115	A1	20020516	WO 2001-FR3427	20011106
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2816208	A1	20020510	FR 2000-14322	20001108

PRIORITY APPLN. INFO.: FR 2000-14322 A 20001108

AB The invention concerns a direct dyeing compn. for keratinous fibers, in particular for human keratinous fibers and more particularly hair, comprising, in a medium suitable for dyeing, at least a direct coloring agent, and furthermore at least a cationic associative polyurethane. The invention also concerns dyeing methods and devices using said compn. A hair dye contained ethoxylated fatty alc., 32.5, oleic acid 2, oleic alc. 1.8, fatty amide 4, glycerin 3, 60% cationic polymer 1.2, Merquat-280 2, sequestering agent q.s., reducing agent q.s., 20% ammonia 8, 1,4-diamino-2-nitrobenzene 0.6, a cationic polyurethane 0.3, and water q.s. 100 g. At the time of use the dye compn. is mixed with equal amt. of oxidant compn. (formulation given) at a ratio of 1:1.5 and applied on the hair. The hair was then rinsed with water after 30 min, washed with shampoo, rinsed with water and dried to give a strong red color.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:353383 HCAPLUS
DOCUMENT NUMBER: 136:356507
TITLE: Sizing composition containing ionic polyurethanes
INVENTOR(S): Bechara, Ibrahim; Chang, Biau-Hung; Ilmenev, Pavel
PATENT ASSIGNEE(S): Crompton Corporation, USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036515	A1	20020510	WO 2001-US30091	20010925

W: BR, KR
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

PRIORITY APPLN. INFO.: US 2000-699813 A 20001030

AB A sizing compn. comprises a polyurethane dispersion prepd. from a prepolymer and a chain extender, the prepolymer being a reaction product of a hydroxylated polymer, the hydroxylated polymer selected from the group consisting of a polyether polyol, a polyester polyol and mixts. thereof, a hydroxylated polyalkadiene, a polyisocyanate, a hydroxylated compd. having a pendent acid group and, optionally, an ester of a fatty acid having about 12 to about 20 carbon atoms 8 contg. hydroxyl groups; a polyolefin wax; and a coupling agent (e.g., an aminosilane).

IT **422312-39-8P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**sizing** compn. contg. ionic polyurethanes)

RN 422312-39-8 HCAPLUS
CN Hexanedioic acid, dihydrazide, polymer with 1,2-ethanediamine, Fomrez 8066-72, 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid, 1,1'-methylenebis[4-isocyanatocyclohexane] and Polytail HA (9CI) (CA INDEX NAME)

CM 1

CRN 389069-80-1
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

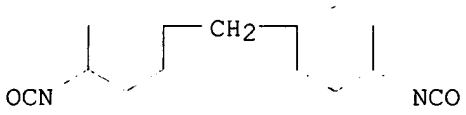
CRN 88507-04-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

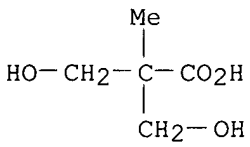
CRN 5124-30-1

CMF C15 H22 N2 O2



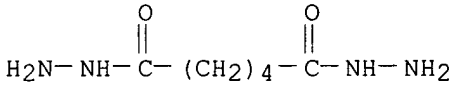
CM 4

CRN 4767-03-7
CMF C5 H10 O4



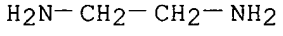
CM 5

CRN 1071-93-8
CMF C6 H14 N4 O2



CM 6

CRN 107-15-3
CMF C2 H8 N2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:69413 HCAPLUS
DOCUMENT NUMBER: 136:118886
TITLE: Associative **cationic polyurethanes** and their use as **thickeners** and **gelling** agents
INVENTOR(S): Mougin, Nathalie; Cottard, Francois; De La Mettrie, Roland; Lion, Bertrand; Maury, Elise
PATENT ASSIGNEE(S): L'Oreal, Fr.
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1174450	A1	20020123	EP 2001-401818	20010706
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2811993	A1	20020125	FR 2000-9609	20000721
CN 1334277	A	20020206	CN 2001-120612	20010716
BR 2001002946	A	20020305	BR 2001-2946	20010718
JP 2002105161	A2	20020410	JP 2001-221150	20010723

PRIORITY APPLN. INFO.: FR 2000-9609 A 20000721

AB **Cationic polyurethanes**, useful as **thickeners** and **gelling** agents for cosmetics, are based on the formula: RX(P)n[L(Y)m]rL'(P')pX'R' [R, R' = hydrophobic group or H; X, X' = amine group (optionally bearing a hydrophobic group) or L''; L, L', L'' = group derived from a diisocyanate; P, P' = amine group (optionally bearing a hydrophobic group); Y = hydrophilic group; r = 1-100; n, m, p = 0-1000], with the polymers having .gtoreq.1 of the amine groups being protonated or quaternized and having .gtoreq.1 hydrophobic group. A typical polymer was manufd. polymn. of 4 mol methylenebiscyclohexyl diisocyanate with 1 mol polyethylene glycol, reaction of the product with 2 mol each stearyl alc. and N-methylethanolamine and quaternization of the 2nd intermediate with 2 mol (Me)2SO4.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:919000 HCAPLUS
DOCUMENT NUMBER: 136:55066
TITLE: Carbon fiber bundles for rubber reinforcement with high knot strength and adhesion to rubber comprising carbon fiber bundles treated with sizing agents with specified hardness
INVENTOR(S): Ozaki, Mitsutoshi; Kobayashi, Masanobu; Matsuhisa, Yoji
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001348783	A2	20011221	JP 2000-167820	20000605

AB The fiber bundles (A1) comprise carbon fiber bundles coated with **sizing** agents with hardness [JIS K-7215 (type A durometer)] .gtoreq.40 and have no. of twists 50-230 turns/m, and show knot strength (ASTM D-2256-88) .gtoreq.0.15 N/ tex, or the fiber bundles comprise A1 bundles having the **sizing** agents comprising thermoplastic **polyurethanes**, urethane-modified epoxy resins, and/or urethane (meth)acrylate compds. as the main component and **cationic** emulsifiers or anionic emulsifiers. The carbon fiber bundles are useful for tire cords. Thus, 2:98 acrylic acid-acrylonitrile copolymer was dry

spun to form precursor fibers, heat-treated in an oxidn. atm. at 250-270.degree., carbonized at 900.degree. and 1400.degree., treated with an aq. electrolytic soln. contg. 5% (NH4)2CO3, and dried to give surface-oxidized carbon fiber bundles. The treated carbon fiber bundles were immersed in an aq. **polyurethane** soln. (Superflex 700), dried, and wound to give carbon fiber bundles with **sizing** agent content 1.0% and showing strand tensile strength 10 GPa and strand modulus 245 GPa and exhibiting **sizing** agent hardness 65, knot strength 0.36 N/tex, and no. of neps 2.0/m.

L12 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:851161 HCAPLUS
DOCUMENT NUMBER: 134:18336
TITLE: Sizing agents containing phosphorous acid for glass fibers and the sized glass fiber bundles for polyacetal reinforcements
INVENTOR(S): Sato, Kazutomo
PATENT ASSIGNEE(S): Nitto Boseki Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000335942	A2	20001205	JP 1999-152112	19990531

AB The sizing agents for glass fibers contain (a) film-forming elements, (b) coupling agents, (c) lubricants, and (d) H2PHO3 as pH controllers to adjust the pH of the sizing agents in 3-6.5. Thus, 100 parts of a reaction product of poly(.epsilon.-caprolactone) polyol with wt.-av. mol. wt. (Mn) 2000 150, trimethylolpropane 2.3, and m-xylylene diisocyanate 30 parts was emulsified by stirring in water contg. DMF and poly(oxyethylene)-poly(oxypropylene) glycol with Mn 16,000, chain-extended with hydrazine, and dild. with water to give a 30%-solid polyurethane emulsion, 2.4% of which was blended with .gamma.-aminopropyltriethoxysilane 0.4, tetraethylenepentamine distearate 0.03, H2PO3 0.15, and an amine-modified epoxy resin 0.07% to give a sizing agent. E glass fiber filaments were treated with the agent, formed into strands, cut, and dried to give glass chopped strands with min. fuzz. It (25%) was compounded with a polyacetal (Duracon M 90-31), pelletized, and injection-molded to give test pieces having excellent mech. strength and good color.

L12 ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:592663 HCAPLUS
DOCUMENT NUMBER: 133:179081
TITLE: Sizing composition for glass fibers used to reinforce thermoplastic or thermosetting matrix polymers
INVENTOR(S): Campbell, Les E.; Vickery, Eric L.
PATENT ASSIGNEE(S): Owens Corning, USA
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000048957	A1	20000824	WO 2000-US3609	20000211
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2001016259	A1	20010823	US 1999-250720	19990216

PRIORITY APPLN. INFO.: US 1999-250720 A 19990216

AB The compn. for glass fibers used to reinforce thermoplastic resins, such as polyolefins, and particularly, polypropylene comprises a maleic acid or its anhydride-modified polypropylene film former having a mol.-wt. >35000 Daltons, an aminosilane coupling agent, a **cationic** lubricant, and a C10-18 fatty acid nucleating agent. The composites produced with the fiber strands coated with such **sizing** compns. have improved fiber adhesion and retention of fiber length. In addn., a method for improving tensile creep and tensile fatigue in polypropylene composites reinforced with glass fibers is provided. Thus, a compn. was made from an aq. soln. contg. A 1100 1.5, Moldpro 932 (fatty acid nucleating agent) 3, PP 448 C (maleated polypropylene) 11, Aquathane 52-00-01 (**polyurethane**) 0.5, Lubsize K 12 0.08%.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:98676 HCAPLUS
DOCUMENT NUMBER: 132:138852
TITLE: Waterborne coatings and paints comprising cationically modified associative cellulose ethers having one hydrophobic group and one quaternary ammonium salt group
INVENTOR(S): Kroon, Gijsbert
PATENT ASSIGNEE(S): Hercules Incorporated, USA
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006656	A1	20000210	WO 1999-US11728	19990525
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6121439	A	20000919	US 1998-128632	19980727
AU 9942112	A1	20000221	AU 1999-42112	19990525

BR 9912477	A	20010417	BR 1999-12477	19990525
EP 1100851	A1	20010523	EP 1999-925924	19990525
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NO 2001000460	A	20010307	NO 2001-460	20010126

PRIORITY APPLN. INFO.: US 1998-128632 A 19980727
WO 1999-US11728 W 19990525

AB A coating compn. comprises a water sol. polysaccharide compn. comprising at least one hydrophobic group selected from aryl, alkyl, alkenyl, aralkyl and mixts. thereof and at least one quaternary ammonium salt group, both connected to a polysaccharide backbone by covalent bonds. The coating compn. also comprises a synthetic thickener such as hydrophobically modified polyethylene oxide, associative acrylic polymer, and hydrophobically modified ethoxylated urethane. The water-sol. polysaccharides are prepd. by (1) prepg. slurry of the associative thickener such as hydroxyethyl cellulose in presence of water and caustic, (2) reacting with glycidyl trimethylammonium chloride at 45.degree. for about 4 h under a nitrogen blanket, and (3) cooling, neutralizing, pptg., filtering, and drying. This coating is used for improving the leveling of waterborne paints.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:819432 HCAPLUS
DOCUMENT NUMBER: 132:50422
TITLE: Ionic polyurethanes, their aqueous dispersions, and evaluation as paper size
INVENTOR(S): Biermann, Christian; Macherey, Heribert; Gorzynski, Marek
PATENT ASSIGNEE(S): Akzo Nobel N. V., Neth.; Eka Chemicals AB
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967310	A1	19991229	WO 1999-SE1113	19990618
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9950737	A1	20000110	AU 1999-50737	19990618
BR 9911453	A	20010320	BR 1999-11453	19990618
EP 1090054	A1	20010411	EP 1999-935216	19990618
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, PT, FI				
JP 2002518563	T2	20020625	JP 2000-555958	19990618
NO 2000006199	A	20010222	NO 2000-6199	20001206

PRIORITY APPLN. INFO.: EP 1998-850112 A 19980624
US 1998-90507P P 19980624
WO 1999-SE1113 W 19990618

AB The title charged polyurethanes are made by reacting isocyanate groups of a polyisocyanate with hydroxyl groups of alcs. comprising (i) alc. selected from .gtoreq.1 diols contg. .gtoreq.10 C atoms, (ii) a second alc. selected from alkylene diols having .ltoreq.8 C atoms, alkyleneoxy diols having .ltoreq.8 C atoms, polyols, and mixts., (iii) a third alc. selected from (a) diols contg. a charged group or atom, (b) diols contg. an uncharged group or atom capable of charge formation and at least partially converting the uncharged group or atom into a charged group or atom, (c) polyols, and further reaction of .gtoreq.1 hydroxyl group derived from the polyol with a compd. contg. a charged group or atom or a compd. contg. an uncharged group or atom capable of charge formation and at least partially converting the uncharged group or atom into a charged group or atom, and mixts. Paper sheets sized with dimethylolpropionic acid-glycerol-glycerol monostearate-N-methyldiethanolamine-TDI copolymer (prepn. given) dispersions (0.1%) had Cobb value 24, vs. 75 for the paper sized with polyurethane without glycerol.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:277666 HCAPLUS
DOCUMENT NUMBER: 128:309268
TITLE: Polyurethane-based thickeners for use in aqueous systems
INVENTOR(S): Link, Guenter; Edelmann, Dirk; Les Mignonades, Alain Pattou
PATENT ASSIGNEE(S): Borchers G.m.b.H., Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19644933	A1	19980430	DE 1996-19644933	19961029
EP 839877	A1	19980506	EP 1997-117910	19971016
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6090876	A	20000718	US 1997-954595	19971020
CA 2219292	AA	19980429	CA 1997-2219292	19971024
JP 10176161	A2	19980630	JP 1997-309489	19971027

PRIORITY APPLN. INFO.: DE 1996-19644933 A 19961029

AB The title compns., which have low viscosities and give systems with good rheol. properties, contain polyurethanes, nonionic emulsifiers, dialkyl alkanedicarboxylates, and H2O and/or other additives. Stirring a mixt. of polyethylene glycol (mol. wt. 12,000) 630.3, C8-10 fatty alcs. 43.5, dialkyl alkanedicarboxylates 720.0, Sn catalyst 4.7, and triisocyanate (Tolonate HBD-LV) 58.0 kg at 100.degree., cooling to 80.degree., and adding propylene glycol 390, C10-13 fatty alcs. 390, polypropylene glycol (mol. wt. 12,000) 60.0, and H2O 540 kg gave a thickener with viscosity 5-8 Pa-s at 23.degree., giving clear, nearly colorless aq. solns. Use of the thickeners in aq. polyacrylate compns. is exemplified.

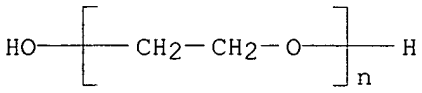
IT **206556-02-7**, Polyethylene glycol-1,2-propanediol-1,3,5-tris(6-isocyanatohexyl)biuret copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(polyurethane-based **thickeners** for use in aq. systems)

RN 206556-02-7 HCAPLUS

CN Imidodicarbonic diamide, N,N',2-tris(6-isocyanatohexyl)-, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and 1,2-propanediol (9CI) (CA INDEX NAME)

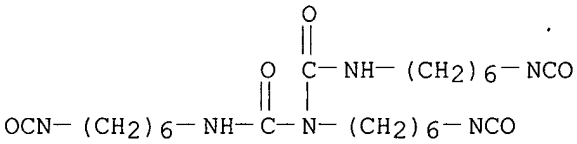
CM 1

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



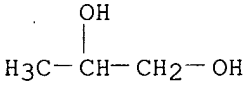
CM 2

CRN 4035-89-6
CMF C23 H38 N6 O5



CM 3

CRN 57-55-6
CMF C3 H8 O2



L12 ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:805710 HCAPLUS
DOCUMENT NUMBER: 128:49713
TITLE: Manufacture of hydroxy-functional quaternary ammonium compounds and manufacture of cationic polyurethanes
INVENTOR(S): Gorzynski, Marek A.; Macherey, J. Heribert
PATENT ASSIGNEE(S): Eka Chemicals AB, Swed.; Gorzynski, Marek A.; Macherey, J. Heribert
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9745395	A1	19971204	WO 1997-SE873	19970527
W: AU, BR, CA, CN, CZ, JP, KR, MX, NO, NZ, PL, RU, SI, SK, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9729872	A1	19980105	AU 1997-29872	19970527
EP 904261	A1	19990331	EP 1997-924459	19970527
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, FI				
JP 11511792	T2	19991012	JP 1997-542192	19970527
PRIORITY APPLN. INFO.:			SE 1996-2041 A	19960528
			US 1996-19200P P	19960606
			WO 1997-SE873 W	19970527

OTHER SOURCE(S): MARPAT 128:49713

AB The invention relates to prepn. of OH-functional quaternary ammonium compds. and their use in the manuf. of aq. dispersion of **cationic polyurethanes** as paper **sizing** agents. Thus, quaternization of N-methyldiethanolamine (I) with epichlorohydrin in the presence of HCO2H gave (3-chloro-2-hydroxypropyl)-bis(2-hydroxyethyl)methylammonium formate which was combined with I and a glycerol monostearate-TDI precondensate (prepn. given) in aq. Me2CO and the whole was refluxed for 1 h at 40, neutralized with 1M HCl and dild. with H2O to give a **polyurethane** dispersion (15-17% solids.). The dild. samples (100 mL; 0.5% solids) of the dispersion remained clear when treated with 1-3 mL of satd. aq. Na2SO4 at 20.degree.. The dispersion at 0.10% dosage gave sized paper with Cobb value of 40, vs. 74 for the paper sized with a similar **cationic polyurethane** prepd. without I.

L12 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:609769 HCAPLUS
DOCUMENT NUMBER: 125:222806
TITLE: Simplified procedure for the manufacture of polyurethanes suitable as thickeners in aqueous systems
INVENTOR(S): Koenig, Klaus; Schwindt, Juergen; Mazanek, Jan; Pedain, Josef; Dietrich, Manfred; Klein, Gerhard; Jerg, Karl-Roland
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 725097	A1	19960807	EP 1996-100829	19960122
EP 725097	B1	19990922		
R: BE, DE, DK, ES, FR, GB, IT, NL, SE				
DE 19503281	A1	19960808	DE 1995-19503281	19950202
ES 2137569	T3	19991216	ES 1996-100829	19960122
US 5612408	A	19970318	US 1996-593036	19960129
CA 2168405	AA	19960803	CA 1996-2168405	19960130
JP 08253548	A2	19961001	JP 1996-37111	19960201
PRIORITY APPLN. INFO.:			DE 1995-19503281	19950202

AB The title thickeners, useful esp. for H2O-thinned coatings, are produced by ethoxylation of fatty alcs. followed by condensation of the resulting mixts. of polyethylene glycol (PEG) and PEG alkyl ethers with difunctional isocyanates, optionally in the presence of a catalyst. A typical

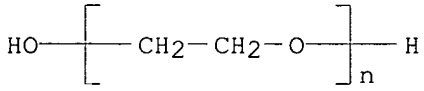
thickener is produced by ethoxylation of stearyl alc. in the presence of KOH, neutralization of the product (2:1 mixt. of PEG monostearyl ether and PEG), removal of H2O by distn., and condensation with OCN(CH2)6NCO in the presence of Sn dioctoate. The thickener (25% soln. in 6:4 propylene glycol/H2O) was tested as a component of a waterborne acrylic dispersion.

IT **181882-18-8P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(mixts. with poly(alkylene glycol) alkyl ether-diisocyanate adducts, **thickeners**; manuf. of polyurethanes suitable as **thickeners** in aq. systems)

RN 181882-18-8 HCAPLUS
CN Imidodicarbonic diamide, N,N',2-tris(6-isocyanatohexyl)-, polymer with 1,6-diisocyanatohexane and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

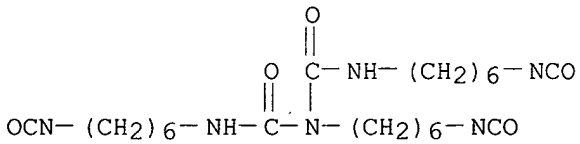
CM 1

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



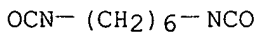
CM 2

CRN 4035-89-6
CMF C23 H38 N6 O5



CM 3

CRN 822-06-0
CMF C8 H12 N2 O2



L12 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:396347 HCAPLUS
DOCUMENT NUMBER: 125:249365
TITLE: Properties of aqueous dispersions of ionic polyurethanes with butadiene-styrene copolymer latexes
AUTHOR(S): Travinskaya, T. V.; Sukhorukova, S. A.; Levchenko, N.

I.
CORPORATE SOURCE: Inst. Chemistry High-Molecular Compounds, Nat. Acad. Sci., Kiev, Ukraine
SOURCE: Zh. Prikl. Khim. (S.-Peterburg) (1996), 69(4), 673-677
CODEN: ZPKHAB; ISSN: 0044-4618
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Colloid and rheol. properties of aq. dispersions of anionic and **cationic polyurethanes** contg. butadiene-styrene rubber latexes were studied. Two of the latexes (BSMK and BS-65) had a significant **thickening** effect on the **polyurethane** dispersions. The physicomech. properties of films prepd. from the dispersions were investigated.

L12 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:181644 HCAPLUS
DOCUMENT NUMBER: 124:205071
TITLE: Multi-layer paint films and base coat composition using specific thickener
INVENTOR(S): Gast, Achim; Shiomi, Kazuki; Taniguchi, Hitoshi
PATENT ASSIGNEE(S): BASF Lacke and Farben AG, Germany
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9600757	A1	19960111	WO 1995-EP2454	19950623
W: AU, CA, MX, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 08010690	A2	19960116	JP 1994-148130	19940629
CA 2191110	AA	19960111	CA 1995-2191110	19950623
AU 9528876	A1	19960125	AU 1995-28876	19950623
AU 701707	B2	19990204		
EP 767818	A1	19970416	EP 1995-924319	19950623
EP 767818	B1	19991201		
R: DE, FR, GB				
ZA 9505272	A	19960202	ZA 1995-5272	19950626
PRIORITY APPLN. INFO.:			JP 1994-148130	19940629
			WO 1995-EP2454	19950623

AB Multi-layer paint films which have a good finished appearance use an aq. base coat compn. which contains aq. polyurethane resin and rheol. control agent having elec. cond. measured in a aq. soln. (3% by wt.) 700-900 .mu.S/cm, a transparent top coat, and the base coat and the top coat are baked at the same time. Laponite RD 3% aq. soln. (elec. cond. 886 .mu.S/cm) was used as the thickener in the preferred amt. 0.5-2%.
IT **174674-16-9**
RL: TEM (Technical or engineered material use); USES (Uses)
(multi-layer paint films and aq. polyurethane base coat compn. using specific conductive **thickener** for good finished appearance)
RN 174674-16-9 HCAPLUS
CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with 1,3-bis(1-isocyanato-1-methylethyl)benzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, formaldehyde, 1,6-hexanediol, Pripol 1009 and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

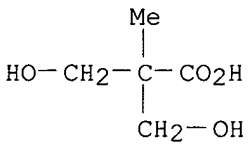
CM 1

CRN 127290-22-6
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 4767-03-7
CMF C5 H10 O4



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CRN 2778-42-9
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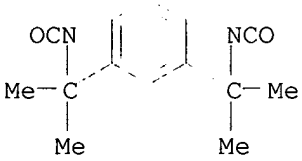

CM 4

CRN 629-11-8
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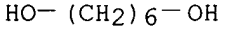
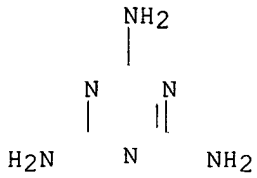


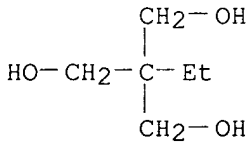
CM 5

CRN 108-78-1
CMF C3 H6 N6



CM 6

CRN 77-99-6
CMF C6 H14 O3



CM 7

CRN 50-00-0
CMF C H2 O

L12 ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:39649 HCAPLUS
DOCUMENT NUMBER: 124:178622
TITLE: An investigation of glass reinforcement effects on thermoplastic polyurethane
AUTHOR(S): Berry, David H.
CORPORATE SOURCE: Behrend College, Pennsylvania State University, Erie, PA, USA
SOURCE: Annu. Tech. Conf. - Soc. Plast. Eng. (1995), 53rd(Vol. 3), 4365-8
CODEN: ACPED4; ISSN: 0272-5223
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The significance of glass reinforced thermoplastic **polyurethane** (TPU) is the potential to provide the beneficial properties of TPU with improved tensile strength and modulus, without sacrificing a substantial amt. of impact strength. This paper presents a study of the addn. of glass to TPU. It includes the evaluation of two different base resins with two different milled fibers. The research is focused primarily on floccular milled fibers with various compatibilizers (sizings) such as untreated, **cationic**, and silane added to a polyester- and a polyester-based TPU. Each type of coated fiber is run at different percentages to det. the optimum **sizing**/resin compatibility.

L12 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:483712 HCAPLUS
DOCUMENT NUMBER: 122:247994
TITLE: New rheology modifiers for detergents and cosmetics
AUTHOR(S): Duccini, Y.
CORPORATE SOURCE: Rohm and Haas France S. A., Fr.
SOURCE: Olaj, Szappan, Kozmet. (1994), (Spec. Issue), 93-7
CODEN: OSZKAT; ISSN: 0472-8602
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A discussion starting with a brief description of polyacrylate chem. The advantages of **thickeners** and stabilizers based on polyacrylate are described and potential applications are proposed. After a brief overview of rheol., the mode of action of the associative **thickener** and stabilizer are explained. A new range of **thickeners** are presented: one of them being on associative polyacrylate, the others being associative **polyurethane**. The performance of the type of new mol. are disclosed, such as: - performance when used with **cationic** substances - performance when used with strong acids - performance when used with peroxide. Finally, new applications for the proposed **thickeners** will be presented.

L12 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:658074 HCAPLUS
DOCUMENT NUMBER: 121:258074
TITLE: Water-thinned compositions for chip-resistant coatings on automobile exteriors
INVENTOR(S): Maeyama, Yoshihiro; Uemae, Masami; Serizawa, Hiroshi; Takahata, Ryoshi
PATENT ASSIGNEE(S): Nippon Carbide Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06207134	A2	19940726	JP 1992-321488	19921106

AB The title compns. contain binders comprising synthetic rubbers with glass temp. .ltoreq.0.degree. 40-100, ethylenic polymers with glass temp. .gtoreq.50.degree. 0-50, and **polyurethanes** 0-50% as well as inorg. fillers contg. 0.5-100 phr white carbon and give coatings with good adhesion to metals. A coating compn. contg. 15:485 (monomer ratio) acrylic acid-styrene copolymer, SN 562 (SBR latex), M 589 (**polyurethane**), Nopcosperse 44C (dispersant), CaCO3, Nipsil E 200A, carbon black, Ba metaborate, SU 125F (aziridine compd.), Adekanol UH 472 (**thickener**), Nopco 8034 (defoamer), and H2O was sprayed on steel precoated with a **cationic** coating, dried 10 min at 90.degree., and heated 20 min at 130.degree. to give a coating showing cross-cut adhesion 100/100.

L12 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:77947 HCAPLUS
DOCUMENT NUMBER: 120:77947
TITLE: Cationic polyurethane compositions, quaternary ammonium salts and their preparation
INVENTOR(S): Bechara, Ibrahim; Baranowski, Thomas R.
PATENT ASSIGNEE(S): Witco Corp., USA

SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 541289	A1	19930512	EP 1992-309879	19921028
EP 541289	B1	19970312		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
EP 718276	A2	19960626	EP 1996-100161	19921028
EP 718276	A3	19960710		
EP 718276	B1	19991222		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
ES 2100302	T3	19970616	ES 1992-309879	19921028
ES 2143096	T3	20000501	ES 1996-100161	19921028
CA 2081865	AA	19930502	CA 1992-2081865	19921030
JP 05320331	A2	19931203	JP 1992-294480	19921102
US 5561187	A	19961001	US 1995-440678	19950515
US 6221954	B1	20010424	US 1995-456655	19950605
US 5696291	A	19971209	US 1996-729046	19961010

PRIORITY APPLN. INFO.:

US 1991-786393	A	19911101
EP 1992-309879	A3	19921028
US 1993-159042	B1	19931129
US 1994-334450	A3	19941104
US 1995-440679	A1	19950515

OTHER SOURCE(S): MARPAT 120:77947

AB Quaternized bis(hydroxyalkyl)amine salts are prepd. by the reaction of a tertiary amine [esp. (hydroxyalkyl)dialkylamine] and slight molar excess alkylene oxide in a strong acid; the salts are reacted with a polyisocyanate and chain-extended with an active-H compd. to give a stable latex. Alternatively a polyurethane contg. tertiary moieties can react with molar excess of alkylene oxide in strong acid to give cationic polyurethane with pendant OH groups, which can be chain-extended. Thus, reaction of aq. Me2NC2H5OH with 70% MeSO3H and then subsequent addn. of alkylene oxide gave primarily bis(hydroxyethyl)dimethylammonium methanesulfonate (I). Reaction of I, polypropylene glycol (mol. wt. 1000), trimethylolpropane, and Desmodur W in N-methyl-2-pyrrolidinone in presence of usual additives at 90-100.degree. gave a prepolymer with NCO content 2.95%, which was chain-extended by adding to H2O to give a semicolloidal dispersion.

L12 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:498620 HCAPLUS
DOCUMENT NUMBER: 113:98620
TITLE: Microporous films from polyether polyurethane thixotropic compositions. Effect of preliminary structure formation and surfactants presence on film properties
AUTHOR(S): Dubyaga, E. G.; Zaplatin, A. A.; Demina, A. I.
CORPORATE SOURCE: Nauchno-Proizvod. Ob'ed. "Polimersintez", USSR
SOURCE: Vysokomol. Soedin., Ser. A (1990), 32(6), 1216-23
CODEN: VYSAAF; ISSN: 0507-5475
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The dependence of microporous film properties, obtained from structured polyether-**polyurethane** system through the **gelation**

stage with diffusional enrichment with nonsolvents on the nature of oligoether in polyether-**polyurethane**, and preliminary structurization and presence of surfactants was studied. The original compns. contain mixt. of nonionic polyether-**polyurethane** based on L-1502 oligooxypropylenediol (mol. wt. 1500), 4,4'-diphenylmethane diisocyanate (I), ethylene glycol (II), and polyether-**polyurethane** based on polytetramethylene glycol, I and II, **cationic** polyether **polyurethane** based on polypropylene glycol, I, and N-methyldiethanolamine, at total concn. of the polymer in the compn. of 20%.

L12 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:612326 HCAPLUS
DOCUMENT NUMBER: 109:212326
TITLE: Aqueous dispersions of fluorinated polyurethanes and their use for textile coatings
INVENTOR(S): Zavatteri, Ignazio; Gambini, Tiziana
PATENT ASSIGNEE(S): Ausimont S.p.A., Italy; Larac S.p.A.
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 273449	A1	19880706	EP 1987-119332	19871229
EP 273449	B1	19920311		
R: BE, CH, DE, ES, FR, GB, LI, NL				
JP 63295616	A2	19881202	JP 1987-324226	19871223
JP 2540572	B2	19961002		
ES 2030048	T3	19921016	ES 1987-119332	19871229
CA 1319220	A1	19930615	CA 1987-555530	19871229
KR 9704930	B1	19970410	KR 1987-15475	19871230
US 4983666	A	19910108	US 1990-467324	19900122
US 5068135	A	19911126	US 1990-596824	19901012
JP 08325951	A2	19961210	JP 1996-19977	19960206
KR 9707320	B1	19970507	KR 1997-3540	19970205

PRIORITY APPLN. INFO.:
IT 1986-22883 A 19861230
US 1987-137358 B1 19871222
JP 1987-324226 A3 19871223
KR 1987-15475 A3 19871230
US 1990-467342 A3 19900122

AB Stable aq. dispersions of fluorinated **polyurethanes** contg. anionic and **cationic** groups, used for coating of textiles, are manufd. by prepn. of a fluorinated polyisocyanate, by reaction of an org. diisocyanate and a mixt. of diols contg. ionizable groups and macroglycols comprising polyols and .gtoreq.1% of .gtoreq.1 hydroxy- and/or carboxy-endcapped fluoropolyether, salification of the fluorinated polyisocyanate to convert the ionizable groups to cations or anions, and dispersion and chain extension of the salified polyisocyanate in H2O. An isocyanate-capped prepolymer was prepd. from .alpha.,.omega.-bis(hydroxymethyl) polyoxyperfluoroalkylene (mol. wt. 2000) and TDI in cellosolve acetate. The polymer was treated with polyoxytetramethylene glycol (mol. wt. 100), dimethylolpropionic acid, and hexamethylene diisocyanate to give a product with 3.1 wt.% free isocyanate group. This product was treated with dimethylethanolamine in acetone, mixed with H2O, and stripped of acetone distd. to give a milky, low viscosity product. A

thickened dispersion contg. 15% of this product was coated on a nylon fabric at 23 g/m2 to give a fabric with spray test value 90, impermeability to a 2 m water column >24 h, and water vapor permeability 93 ng/s-m2-Pa, compared to 50, 0, 818, resp., for a nylon fabric coated at 23 g/m2 for a similar polymer not contg. a polyoxyperfluoro compd.

L12 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:551391 HCAPLUS
DOCUMENT NUMBER: 109:151391
TITLE: Water-repellent, permeable polyurethane coatings for textiles
INVENTOR(S): Dahmen, Kurt; Stockhausen, Dolf; Stukenbrock, Karl Heinz
PATENT ASSIGNEE(S): Chemische Fabrik Stockhausen G.m.b.H., Fed. Rep. Ger.
SOURCE: Ger. Offen., 7 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3633874	A1	19880414	DE 1986-3633874	19861004
DE 3633874	C2	19881013		
EP 283556	A2	19880928	EP 1987-114169	19870929
EP 283556	A3	19890830		
EP 283556	B1	19920520		
R: CH, DE, FR, GB, LI, NL				
CA 1301566	A1	19920526	CA 1987-548146	19870929
JP 63099376	A2	19880430	JP 1987-248229	19871002
US 4774131	A	19880927	US 1987-105944	19871002

PRIORITY APPLN. INFO.: DE 1986-3633874 19861004.

AB The title coatings are applied by coating textiles with **cationic** aq. dispersions of **polyurethanes** bearing covalently bound solubilizing groups and then with anionic aq. dispersions of **polyurethanes** bearing such groups, or vice versa. A 66:33 polyester-cotton fabric (160 g/m2) was coated with 30 g/m2 (wet basis) paste contg. 100 parts 30% aq. **cationic polyurethane** dispersion [viscosity 50 mPa-s, prepd. from polypropylene glycol (mol. wt. 1000), dicyclohexylmethane diisocyanate, and MeN(CH2CH2OH)2] and 5 parts 50% **thickener** and then, without drying, coated with 40 g/m2 paste contg. 70 parts 40% aq. anionic **polyurethane** dispersion [viscosity 300 mPa-s, from polyoxyalkylated glycerol (mol. wt. 4000), isophorone diisocyanate, and dimethylolpropionic acid], 6 parts **thickener**, and 23 parts H2O, dried, and finished with a fluorocarbon emulsion to give a fabric with water column (DIN 53 886) 700-730 mm and spray test (AA TCC 22-1974) 90-100 (730 and 90-100, resp., after drycleaning) and moisture permeability 9.44 mg/cm2-h.

L12 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:152006 HCAPLUS
DOCUMENT NUMBER: 108:152006
TITLE: Studies of sized cotton yarns by FT-IR photoacoustic spectroscopy
AUTHOR(S): Yang, Charles Q.; Bresee, Randall R.
CORPORATE SOURCE: Dep. Chem., Marshall Univ., Huntington, WV, 25701, USA
SOURCE: J. Coated Fabr. (1987), 17(Oct.), 110-28
CODEN: JCTFAL; ISSN: 0093-4658

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fourier-transform IR photoacoustic spectroscopy was used to identify polymeric **sizing** agents on cotton yarns, to det. the degree of penetration of the **sizing** agents, to det. the residual **sizing** agent in desized cotton yarns, and to study the H bonding between **sizing** agents and cotton cellulose. The **sizing** agents, i.e., E-1618 and E 1623 **cationic** acrylic polymers and 2030 L as aliph. isocyanate-based **polyurethane**, were not homogeneously distributed between the surfaces and the bulk of the yarns, but had a higher concn. in the yarn's near-surface than in its bulk. Desizing removed a greater amt. of **sizing** agents from the yarn's near-surface than from the bulk. Since most of the **sizing** agents remained in the yarn interior after the **sizing** process, they appeared to be suitable for permanent or semi-durable **sizing** of cotton yarns. More H bonds were formed in the bulk of the yarn than in the near-surface.

L12 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:133669 HCAPLUS
DOCUMENT NUMBER: 108:133669
TITLE: Sizing technologies and interaction of active filling materials
AUTHOR(S): Kutasi, Tamas; Varga, Gyozo
CORPORATE SOURCE: Papirip. Tansz., Konyvuipari Muszaki Foisk., Hung.
SOURCE: Papiripar (1987), 31(6), 212-15
CODEN: PAPIBT; ISSN: 0031-1448
DOCUMENT TYPE: Journal
LANGUAGE: Hungarian
AB Bleached pine sulfate pulp was used to produce model papers similar to offset printing papers. The **sizing** materials were Furtin 3 N (resin size), Cyclopal KE (**cationic polyurethane**), and Aquapel 2 (**cationic** alkyl ketene dimer). The fillers were kaolin and CaCO3. In the traditional rosin **sizing** the role of active filler was favorable in spite of the ash content increase. The amt. of pptg. agent (Al2CSO4)3) could be significantly decreased or skipped altogether. When CaCO3 active filler was used, Cyclopal KE showed exceptionally good strength and **sizing** values.

L12 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:133664 HCAPLUS
DOCUMENT NUMBER: 108:133664
TITLE: Polyurethane resins for paper sizing
AUTHOR(S): Gadda, Angelo; Massa, Vincenzo; Zavatteri, Ignazio
CORPORATE SOURCE: LARAC S.p.A., Castellanza, Italy
SOURCE: Ind. Carta (1987), 25(6), 285-90
CODEN: ICAMA4; ISSN: 0019-7548
DOCUMENT TYPE: Journal
LANGUAGE: Italian
AB Surface **sizing** of paper was feasible with **cationic**, anionic, and nonionic **polyurethanes**, depending on the yield levels, pH range, and chem. aids used. Internal **sizing** with **cationic** resin gave excellent results in terms of Cobb dependence on **sizing** agent and filler concn., pH, and water quality.

L12 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:194896 HCAPLUS
DOCUMENT NUMBER: 100:194896
TITLE: Triurea grease compositions

INVENTOR(S): Shimizu, Shirow; Takahashi, Shuichi; Kato, Kazuo; Takeuchi, Koichi; Iwasaki, Kozo; Kurahashi, Motobumi; Ichimaru, Tetsuo
PATENT ASSIGNEE(S): Chuo Yuka Co., Ltd., Japan; Mitsui Toatsu Chemicals, Inc. ; Nippon Steel Corp.
SOURCE: Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 103864	A2	19840328	EP 1983-109179	19830916
EP 103864	A3	19840822		
EP 103864	B1	19860305		
R: FR, GB, IT, NL				
JP 59051998	A2	19840326	JP 1982-160795	19820917
JP 61002716	B4	19860127		
CA 1221084	A1	19870428	CA 1983-436506	19830912
US 4529530	A	19850716	US 1983-533637	19830919

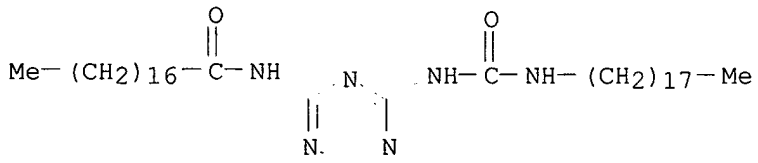
PRIORITY APPLN. INFO.: JP 1982-160795 19820917
AB To prep. a thickener for lubricating greases, 87.5 g 2-octadecylureido-4-octadecylamino-1,3,5-triazine and 35 g octadecylamine in 445 g paraffin oil was mixed with 32.5 g diphenylmethane-4,4'-diisocyanate in 400 g of the same oil. The mixt. was heated at 185.degree. with vigorous stirring, cooled to room temp., and finished by rolling to obtain a grease with a worked penetration, dropping point, oil sepn. (at 100.degree. for 24 h) and oxidn. stability (at 150.degree. for 200 h) were 274, 258.degree., 1.4%, and 2 kg-f/cm2, resp. Twenty-nine more compds. were also synthesized.

IT **90117-87-6 90117-96-7 90117-98-9**
RL: USES (Uses)
(**thickeners**, for lubricating greases)

RN 90117-87-6 HCAPLUS
CN Octadecanamide, N-[4-[[(octadecylamino)carbonyl]amino]-1,3,5-triazin-2-yl]-, polymer with 2-aminoethanol, 4,4'-diisocyanato-3,3'-dimethyl-1,1'-biphenyl and 1-octadecanamine (9CI) (CA INDEX NAME)

CM 1

CRN 90117-76-3
CMF C40 H76 N6 O2



CM 2

CRN 141-43-5
CMF C2 H7 N O

$H_2N-CH_2-CH_2-OH$

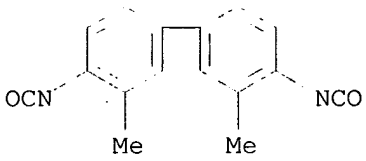
CM 3

CRN 124-30-1
CMF C18 H39 N

$H_2N-(CH_2)_{17}-Me$

CM 4

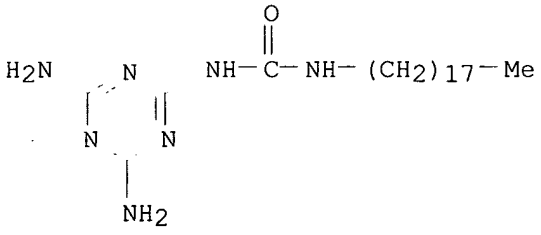
CRN 91-97-4
CMF C16 H12 N2 O2



RN 90117-96-7 HCAPLUS
CN Urea, N-(4,6-diamino-1,3,5-triazin-2-yl)-N'-octadecyl-, polymer with 1-amino-2-propanol, benzenamine, 4-methylbenzenamine, 1,1'-methylenebis[4-isocyanatobenzene] and 1-octadecanamine (9CI) (CA INDEX NAME)

CM 1

CRN 20103-66-6
CMF C22 H43 N7 O



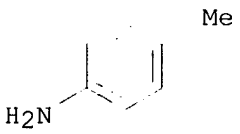
CM 2

CRN 124-30-1
CMF C18 H39 N

$H_2N-(CH_2)_{17}-Me$

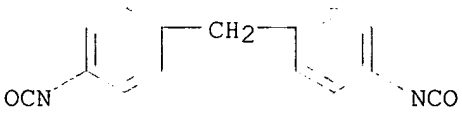
CM 3

CRN 106-49-0
CMF C7 H9 N



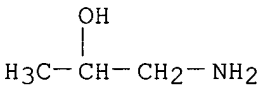
CM 4

CRN 101-68-8
CMF C15 H10 N2 O2



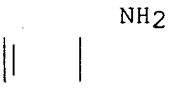
CM 5

CRN 78-96-6
CMF C3 H9 N O



CM 6

CRN 62-53-3
CMF C6 H7 N

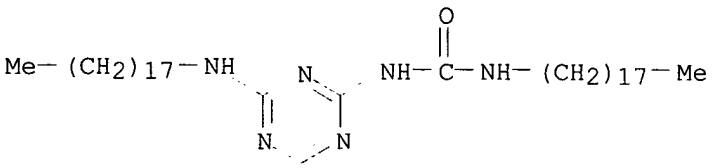


RN 90117-98-9 HCAPLUS
CN Octadecanamide, polymer with 2-aminoethanol, 4-chlorobenzenamine, 1,1'-methylenebis[4-isocyanatobenzene], 1-octadecanamine and

N-octadecyl-N'-[4-(octadecylamino)-1,3,5-triazin-2-yl]urea (9CI) (CA INDEX NAME)

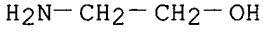
CM 1

CRN 90117-72-9
CMF C40 H78 N6 O



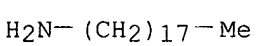
CM 2

CRN 141-43-5
CMF C2 H7 N O



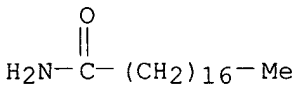
CM 3

CRN 124-30-1
CMF C18 H39 N



CM 4

CRN 124-26-5
CMF C18 H37 N O

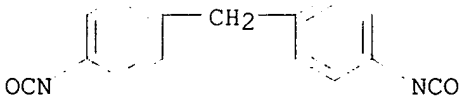


CM 5

CRN 106-47-8
CMF C6 H6 Cl N

CM 6

CRN 101-68-8
CMF C15 H10 N2 O2



L12 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1983:112500 HCAPLUS
DOCUMENT NUMBER: 98:112500
TITLE: Laminated plates for electric insulation
PATENT ASSIGNEE(S): Fuji Fiber Glass K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57165917	A2	19821013	JP 1981-50572	19810406
JP 02061081	B4	19901219		

AB Glass cloths from glass yarns treated with a **sizing** agent are laminated by using a resin. Thus, glass yarns were treated with a **sizing** agent contg. a **polyurethane** emulsion 0.3, a urethane-modified polyester emulsion 2, acrylic silane 0.3, a **cationic** surfactant 0.14, paraffin 0.07, LiCl 0.1, and water 97.09%, woven into a glass cloth, coated with an epoxy resin, laminated, and pressed to give a laminated plate having bending strength 46.3-55.3 kg/cm2 and high insulation resistance.

L12 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:587000 HCAPLUS
DOCUMENT NUMBER: 97:187000
TITLE: Glass fiber sizing agent
PATENT ASSIGNEE(S): Fuji Fiber Glass K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57082148	A2	19820522	JP 1980-157734	19801111
JP 62012184	B4	19870317		

AB Glass fiber **sizing** agents contain a urethane-modified polyester resin as a film-forming agent. Thus, freshly spun glass filaments were treated with a **sizing** agent contg. **polyurethane** emulsion 0.3, urethane-modified polyester emulsion 2, acrylic silane 0.3, **cationic** surfactant 0.14, paraffin 0.07, LiCl 0.1, and deionized H2O 97.09 parts, bundled, and fabricated to give glass cloth having tensile strength 96 kg/25 mm.

L12 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:583458 HCAPLUS
DOCUMENT NUMBER: 97:183458
TITLE: Glass fiber-reinforced plastic panels
PATENT ASSIGNEE(S): Fuji Fiber Glass K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57083533	A2	19820525	JP 1980-157735	19801111

AB Glass fiber-reinforced plastic panels with high tensile strength are prepd. without desizing and surface retreatment by reinforcing plastics with cloths woven with glass threads treated with plastic-compatable **sizing** agents. Thus, glass threads were treated with a mixt. of a urethane-modified polyester emulsion (25% solids) 2.0, a **polyurethane** emulsion (40% solids) 0.5, an acrylsilane 0.3, a **cationic** surfactant 0.14, LiCl 0.1, a paraffin 0.07 and water 96.89%, plain-woven into a cloth at d. 19/25 mm (both warp and fill). An unsatd. polyester resin 60, a dimensional stabilizer 40, CaCO3 150, a hardener 1, a lubricant oil 4, a tackifier 0.5 parts, and 25-mm glass rovings were compounded. When the compd. was inserted between two sheets of the cloth and the assembly was molded at 140.degree. and 130 kg/cm2 for 4 min into water-storage panels, testing of the moldings showed av. bending strength 40.7 kg/mm2, compared with 24.6 kg/mm2 when the threads were treated with a starch-based **sizing** agent and desized by baking.

L12 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:164444 HCAPLUS
DOCUMENT NUMBER: 96:164444
TITLE: Polyurethanes for surface sizing
AUTHOR(S): Pask, M. D.
CORPORATE SOURCE: Pioneer Chem. Div., Armak Co., Maple Shade, NJ, 08052, USA
SOURCE: Papermakers Conf., [Proc.] (1982) 57-61
CODEN: TPCPDY; ISSN: 0197-5153
DOCUMENT TYPE: Journal
LANGUAGE: English

AB For base sheets with pH 6.5-9.0, **cationic polyurethane** -starch mixts. gave higher **sizing** values than for acidic sheets (pH 4.5); **sizing** values increased with increasing drying temp. of the paper web. The **sizing** efficiency of anionic

polyurethanes decreased with increasing rosin loading as internal size, and **polyurethanes** reduced the linting and feathering of sized paper.

L12 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:86463 HCAPLUS
DOCUMENT NUMBER: 96:86463
TITLE: Sizing composition and sized strand useful as reinforcement for reinforced molded composites having improved physical properties
INVENTOR(S): Pollman, Gary A.
PATENT ASSIGNEE(S): PPG Industries, Inc. , USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4301052	A	19811117	US 1979-72713	19790904
US 4382991	A	19830510	US 1981-257084	19810424

PRIORITY APPLN. INFO.: US 1979-72713 19790904

AB **Sizing** compns. for glass fibers for laminates with molding compds. imparting good tensile and flexural strength to molded articles comprise a **polyurethane** latex contg. a **cationic** unsatd. organoaminosilane and an aminosilane. Thus, an aq. dispersion was prepd. contg. the following formulation: Rucothane 20101L [78474-49-4] **polyurethane** 14.0, **cationic** methacrylate functional silane Y 5823 [80702-95-0] 0.5, and diaminosilane Z 6026 [1760-24-3] 0.8%. The formulation was applied to chopped glass strands which were then incorporated into a bulk molding polyester. Compression molded specimens contg. the fibers had tensile strength 4.7 .times. 103 psi and flexural strength 12.0 .times. 103 psi.

L12 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:5118 HCAPLUS
DOCUMENT NUMBER: 94:5118
TITLE: Surface sizing of paper
PATENT ASSIGNEE(S): Lion Akzo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55090699	A2	19800709	JP 1978-160399	19781225
JP 60047960	B4	19851024		

AB Cationically modified starch is used as a fixing agent and an anionic water sol. polyurethane is used as a size for paper. Thus, 1% pulp slurry was mixed with 0.5% (based on the pulp) cationically modified starch (2.7% N) and 15% CaCO3, dild. with water to 0.3%, and used to prep. paper, which was coated with 5% aq. oxidized starch contg. 0.2% anionic polyurethane (I) [60130-62-3] to give sheets contg. 0.14% size and having Stoechigt sizing degree 45 s, compared with 5.1 s in the absence of the fixing

agent. I was prepd. by heating 35.8 g glycerin monostearate, 0.9 g dibutyltin diacetate, 100 mL acetone, and 35.8 g tolylene diisocyanate for 30 min, mixing with 100 mL acetone contg. 23.5 g 2.2-bis(hydroxymethyl)propionic acid Et3N salt, heating at reflux for 1 h, and mixing the product with acetone to give a 17% soln.

L12 ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:533338 HCAPLUS
DOCUMENT NUMBER: 93:133338
TITLE: Catalysts for controlled gelation of hydrophilic urethane prepolymers
INVENTOR(S): Yanagitani, Masahide; Naito, Kazuaki; Kariya, Kokichi; Aoyama, Motoki; Nishimura, Seiichi; Yamasaki, Hiromichi; Kawaura, Hirokatsu; Kurosawa, Akira; Ono, Kazuhito
PATENT ASSIGNEE(S): Toho Chemical Industry Co., Ltd., Japan; Ohbayashi-Gumi, Ltd.
SOURCE: Jpn. Tokkyo Koho, 7 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55002212	B4	19800118	JP 1976-132338	19761105
JP 53066997	A2	19780614	JP 1976-132338	19761105

PRIORITY APPLN. INFO.: JP 1976-132338 19761105
AB Hydrophilic urethane prepolymers are mixed with anionic or cationic surfactants to delay or accelerate gelation, resp. Thus, when 10 parts Hicel OH 1A [74913-36-3] and 90 parts 1% aq. C12H25SO3Na [151-21-3] were mixed at 10.degree., the gelation time was 650 s, compared with 315 without sulfate.

L12 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:409812 HCAPLUS
DOCUMENT NUMBER: 93:9812
TITLE: Polyurethanes for surface sizing
AUTHOR(S): Pask, M. D.
CORPORATE SOURCE: Pioneer Chem. Div., Armak Co., Maple Shade, NJ, 08052, USA
SOURCE: TAPPI Sizing Short Course Notes (1980), 73-7. TAPPI: Atlanta, Ga.
CODEN: 43ILAC
DOCUMENT TYPE: Conference
LANGUAGE: English
AB In the **sizing** of paper with **cationic polyurethane** (I) contg. starch, the highest **sizing** value (1105 s) was obtained for alk. base paper (pH 8.0), and **sizing** value increased with increasing temp. of paper drying. The **sizing** efficiency of anionic I decreased with increasing resin size loading, therefore, the optimum **sizing** performance of anionic I was obtained when low levels of resin were added to the wet end furnish. The use of I in surface **sizing** also reduced the linting of resulting paper up to 50%.

L12 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:78255 HCAPLUS

DOCUMENT NUMBER: 92:78255
TITLE: Coating based on aqueous, emulsifier-free, sedimentation-stable polyurethane dispersions
INVENTOR(S): Wenzel, Wolfgang; Schroeer, Walter; Preuss, Manfred; Koch, Hans Joachim
PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 31 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2807479	A1	19790823	DE 1978-2807479	19780222
EP 3785	A1	19790905	EP 1979-100390	19790212
EP 3785	B1	19811014		
R: BE, CH, DE, FR, GB, IT, NL, SE				
US 4206255	A	19800603	US 1979-11463	19790212
FI 7900569	A	19790823	FI 1979-569	19790220
BR 7901103	A	19790911	BR 1979-1103	19790221
JP 54122334	A2	19790921	JP 1979-18531	19790221
HU 24166	O	19821228	HU 1979-BA3759	19790221
HU 181643	B	19831028		

PRIORITY APPLN. INFO.: DE 1978-2807479 19780222

AB The title compns., useful in finishing PVC [9002-86-2], contain 60% solids comprising 2-90% **polyurethane** contg. 5-100 mequiv % anionic or **cationic** groups or polyoxyethylene units (softening point <195.degree., Shore A hardness <97) and 98-10% **polyurethane** contg. 5-30 mequiv % of the above groups (softening point >200.degree., Shore D hardness >50). Thus, a mixt. of 40% aq. dispersion of adipic acid-1,4-butanediol-hexamethylene diisocyanate-hexanediol-Na 2-[(2-aminoethyl)amino]ethanesulfonate copolymer (I) [71764-02-8] 20, 40% aq. dispersion of bisphenol A polypropylene glycol ether (1:2)-formaldehyde-hexamethylene diisocyanate-isophorone diisocyanate-Na 3-hydroxy-1-(hydroxymethyl)propanesulfonate polypropylene glycol ether (1:2)-urea copolymer (II) [71806-35-4] 80, polyacrylate **thickener** 2.5, and pigment prepn. 5 parts is applied to PVC foam, giving a coating with residual strength after 6 wk 83%, adhesion good, top surface dry and flexible, and inverse surface dry and flexible, compared with 18% (4 wk), good, blocking, and tacky, resp., for I alone, and 100%, unsatisfactory, dry and hard, and dry and hard, resp., for II alone.

L12 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:42891 HCAPLUS
DOCUMENT NUMBER: 92:42891
TITLE: Water-soluble, crosslinked, nitrogen-containing condensation products
INVENTOR(S): Fikentscher, Rolf; Streit, Werner; Welzel, Gerhard; Gans, Karl
PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 15 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2817203	A1	19791031	DE 1978-2817203	19780420

AB An ethylene oxide-propylene oxide block copolymer, OCN(CH2)6NCO or TDI, and crosslinking agents such as H2O, polyhydric alcs., and polyamines are used to prep. condensation products. Aq. solns. of these products increase in viscosity with increasing temp. and are useful for regulating the viscosities of aq. solns. and dispersions of other resins, e.g., acrylate resins. Thus, 600 parts HO(CH2CH2O)n(CH2CHMeO)m(CH2CH2O)nH (n = 110, m = 44) in 600 parts tert-BuOH is treated slowly at 60.degree. with 17.7 parts OCN(CH2)6NCO, heated at 65.degree., freed of solvent, treated (54 parts) with 316 parts H2O at 55-70.degree., treated with 61.7 parts 14.5% aq. polyethylenimine (d.p. 35), heated at 65.degree., and mixed with water to give a 14% aq. resin [72427-68-0] soln. with viscosity 30, 2300, and 2000 mPa-s at 20, 50, and 80.degree., resp.

IT **72427-69-1**
RL: USES (Uses)
(**thickening** agents, with increased viscosity at high temp.)

RN 72427-69-1 HCAPLUS

CN 1,3-Propanediamine, N-(2-aminoethyl)-, polymer with (chloromethyl)oxirane, 1,6-diisocyanatohexane, 1,2-ethanediamine, N,N''-1,2-ethanediylbis[1,3-propanediamine], methyloxirane and oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 13531-52-7
CMF C5 H15 N3

$H_2N-CH_2-CH_2-NH-(CH_2)_3-NH_2$

CM 2

CRN 10563-26-5
CMF C8 H22 N4

$H_2N-(CH_2)_3-NH-CH_2-CH_2-NH-(CH_2)_3-NH_2$

CM 3

CRN 822-06-0
CMF C8 H12 N2 O2

$OCN-(CH_2)_6-NCO$

CM 4

CRN 107-15-3
CMF C2 H8 N2

$H_2N-CH_2-CH_2-NH_2$

CM 5

CRN 106-89-8
CMF C3 H5 Cl O

CH_2-Cl

CM 6

CRN 75-56-9
CMF C3 H6 O

CH_3

CM 7

CRN 75-21-8
CMF C2 H4 O

L12 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:23576 HCAPLUS
DOCUMENT NUMBER: 92:23576
TITLE: Coupling compositions for glass fibers
INVENTOR(S): Sawai, Michio
PATENT ASSIGNEE(S): Central Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54096193	A2	19790730	JP 1978-1676	19780111

AB Glass fibers with improved adhesion to styrene polymers are prepd. by **sizing** the fibers with compns. contg. epoxy-modified **polyurethanes** and aminosilanes. Thus, glass fibers are coated with 1.42% (solids basis) 60% epoxy-**polyurethane** emulsion 5.0, Y

9072 [56091-06-6] (aminosilane) 1.0, and **Cationic** X (imidazoline **cationic** surfactant) 0.1%, dried, and cut. Polystyrene [9003-53-6] contg. 30% sized fibers is molded to a product with tensile strength 11.2 kg/cm2, compared with 8.8 kg/cm2 for glass fibers sized with a poly(vinyl acetate) in place of **polyurethane**
.

L12 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:138997 HCAPLUS
DOCUMENT NUMBER: 90:138997
TITLE: Thickening polymer composition
INVENTOR(S): Kim, Samuel Sangmyung; Stevens, Travis Edward
PATENT ASSIGNEE(S): Rohm and Haas Co., USA
SOURCE: Ger. Offen., 61 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2752955	A1	19780615	DE 1977-2752955	19771128
US 4180491	A	19791225	US 1976-746449	19761201
CA 1096983	A1	19810303	CA 1977-291180	19771118
SE 7713313	A	19780602	SE 1977-13313	19771124
NL 7712979	A	19780605	NL 1977-12979	19771124
FR 2372865	A1	19780630	FR 1977-36098	19771130
FR 2372865	B1	19810102		
JP 53090493	A2	19780809	JP 1977-144576	19771201
GB 1601220	A	19811028	GB 1977-52948	19771220
AU 515783	B2	19810430	AU 1978-32174	19780104
AU 7832174	A1	19790712		

PRIORITY APPLN. INFO.: US 1976-746449 19761201

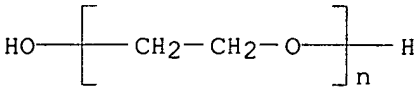
AB Concs. of thickening agents for use in textile printing pastes are insensitive to pH changes and other electrolyte conditions and contain 1:0.01-1:10 nonionic polyurethane-surfactant mixt. 5-50, inert org. diluent 5-35, and water 0-65%. Thus, a 1.5% aq. soln. of a polyurethane (I) [53426-99-6] prepd. from trimethylolpropane, toluene diisocyanate, polyethylene glycol, and octadecanol had a viscosity of 2600 cP. The addn. of 0.5% Triton X 102 nonionic surfactant to the mixt. increased the viscosity to >100,000 cP. A clear conc. (18 parts) prepd. from I 25, nonionic surfactant 17, MeOH 30, and water 23 parts was mixed with 45.2 parts com. pigment dispersion (Aqua Hue Blue BGG-9521) and 36.8 parts water to give a cream-like dye conc. with viscosity 5000 cP.

IT **67554-44-3**
RL: USES (Uses)
(**thickening** agents, pigment concs. contg., for textile printing paste)

RN 67554-44-3 HCAPLUS
CN Imidodicarbonic diamide, N,N',2-tris(6-isocyanatohexyl)-, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

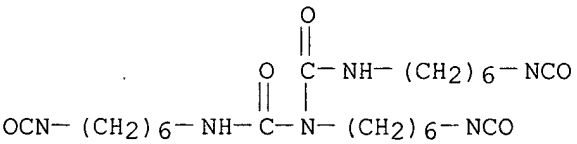
CM 1

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



CM 2

CRN 4035-89-6
CMF C23 H38 N6 O5



L12 ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1975:581381 HCAPLUS
DOCUMENT NUMBER: 83:181381
TITLE: Cationic polyurethanes
INVENTOR(S): Schuermann, Horst; Bung, Josef; Von Aalten, Hendrikus A. A.
PATENT ASSIGNEE(S): AKZO G.m.b.H., Ger.
SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2400490	A1	19750717	DE 1974-2400490	19740105
DE 2400490	C2	19820603		
AT 7409426	A	19770215	AT 1974-9426	19741125
AT 339607	B	19771025		
AT 346180	B	19781025	AT 1976-8662	19741125
FR 2256937	A1	19750801	FR 1974-39765	19741205
FR 2256937	B1	19800829		
NO 7404454	A	19750708	NO 1974-4454	19741210
NO 141167	B	19791015		
NO 141167	C	19800123		
CA 1042133	A1	19781107	CA 1974-215808	19741210
ZA 7407909	A	19760128	ZA 1974-7909	19741211
ES 432957	A1	19761101	ES 1974-432957	19741216
DD 119803	C	19760512	DD 1974-183222	19741219
DD 121659	C	19760812	DD 1974-189369	19741219
AU 7476772	A1	19760624	AU 1974-76772	19741223
CH 621807	A	19810227	CH 1974-17013	19741223
JP 50095503	A2	19750730	JP 1975-4212	19741225
JP 55014088	B4	19800414		
FI 7403787	A	19750706	FI 1974-3787	19741230
FI 58783	B	19801231		

FI 58783	C	19810410		
BR 7410962	A0	19750826	BR 1974-10962	19741230
NL 7417024	A	19750708	NL 1974-17024	19741231
NL 177218	B	19850318		
NL 177218	C	19850816		
GB 1491091	A	19771109	GB 1975-4	19750102
BE 824067	A1	19750502	BE 1975-152116	19750103
SE 7500052	A	19750707	SE 1975-52	19750103
SE 422804	B	19820329		
SE 422804	C	19820708		
HU 170930	P	19771028	HU 1975-AO398	19750103
CS 194713	P	19791231	CS 1975-71	19750103
SU 944507	A3	19820715	SU 1975-2095620	19750103
JP 55107599	A2	19800818	JP 1979-150112	19791121
JP 57060480	B4	19821220		

PRIORITY APPLN. INFO.: DE 1974-2400490 19740105
AT 1974-9426 19741125

AB The polymn. of glycol monstearate with toluenediisocyanate and N-methyldiethanolamine HCl gave **cationic polyurethane** (I) [57029-48-8] useful for **sizing** of paper. Thus, paper (surface wt. 80 g/m2) was sized in a bath contg. 10% oxystarch and 0.25% I by 1.85% **sizing** solids to give a specimen with 1590 sec **sizing** degree and 19 Cobb value.

L12 ANSWER 41 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1972:114406 HCAPLUS
DOCUMENT NUMBER: 76:114406
TITLE: Forming microporous films by coagulating polyurethane solutions
INVENTOR(S): Conrad, Horst; Weimann, Norbert
PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.
SOURCE: Ger. Offen., 71 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2025616	A	19711209	DE 1970-2025616	19700526
DE 2025616	B2	19740207		
DE 2025616	C3	19741114		
GB 1345763	A	19740206	GB 1971-13933	19710510
BE 767649	A1	19711018	BE 1971-103861	19710525
NL 7107263	A	19711130	NL 1971-7263	19710526
FR 2090310	A5	19720114	FR 1971-19141	19710526

PRIORITY APPLN. INFO.: DE 1970-2025616 19700526

AB Microporous films were made by heating and **gelling** films of **polyurethane** solns. or mixts. of 80-99.5 parts **polyurethane** soln. and 0.5-20 parts **cationic polyurethane**-nonsolvent dispersion at .geq.50% relative humidity, coagulating the polymer in an aq. bath, optionally treating the films with an aliphatic alc. for 0.2-30 min, and then drying the films. For example, 6000 parts 1,6-hexanediol-2,2-dimethyl-1,3-propanediol copolymer was heated with 1550 parts 4,4'-diphenylmethane diisocyanate and 1895 parts DMF at 50.deg., and 7525 parts of the reaction mixt. was added to a soln. of 190 parts carbodihydrazide in 16010 parts DMF to give a clear, homogeneous, 2,2-dimethyl-1,3-propanediol-4,4'-diphenylmethane

diisocyanate-1,6-hexanediol copolymer (I) [34355-89-0] elastomer soln. A 23% DMF soln. of I contg. 1.5% H2O was heated at 100.deg., poured onto a glass plate, and pre-gelled at 75.deg. and 90% relative humidity. The gelled film was coagulated 30 min in H2O at room temp., and dried at room temp. The microporosity of the films obtained increased with increasing pre-**gelling** time up to 30 min. Films pre-gelled for 2 hr were completely transparent and permeable to H2O vapor.

L12 ANSWER 42 OF 42 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1968:436738 HCAPLUS
DOCUMENT NUMBER: 69:36738
TITLE: Microporous, water vapor-permeable polyurethane sheets
INVENTOR(S): Zorn, Bruno; Oertel, Harald; Dieterich, Dieter
PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.
SOURCE: Ger., 16 pp.
CODEN: GWXXAW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1270276		19680612	DE	19660622

AB The title sheets with improved H2O-vapor permeability, surface properties, and suitable for artificial leather and textile coatings were prepd. from a mixt. of 70-90 parts **polyurethane**-urea (I), obtained from polyhydroxy compds., low-mol.-wt. diols, and diisocyanates, and 10-30 parts of an aq. dispersion of **cationic** I contg. quaternary ammonium groups in 200-2000 parts of a H2O-sol. strongly polar solvent, b. >100.degree., giving the compn. shape, **gelling** the compn. in moist air, and removing the solvent with H2O. In some cases, an anionic syntan such as a phenol, HCHO, or a carboxylic acid is added to the soln. before **gelation**. Thus, compn. A was prepd. by treating 6500 parts of a dry copolyester prepd. from adipic acid and a 65:35 mixt of 1,6-hexanediol and 2,2-dimethyl-1,3-propanediol with 1713 parts diphenylmethane-4,4'-diisocyanate at 96-8.degree. and maintained at this temp. for 70 min. To 23,140 parts HCONMe2 contg. 226 parts carbohydrazide at 60.degree., 8000 parts of the above hot preadduct was added to give the final homogeneous elastomer soln. A. The **cationic** I (B) was prepd. by treating 8000 parts of a polyester obtained from phthalic acid, adipic acid, and ethylene glycol (1:1:2.2 ratio) with 2160 parts tolylene, diisocyanate (65:35 isomer mixt.) for 90 min. at 100.degree.. To this preadduct. acetone 3950, N-methyldiethanolamine 800, and acetone 3500 parts were added in sequence at 50.degree. and the mixt. agitated until the viscosity was 20 poises. To the resulting soln., 244 parts 1,3-dimethyl-4,6-bischloromethylbenzene in 790 parts acetone and an addnl. 3500 parts acetone were added. When a viscosity of 40 poises was obtained, an addnl. 8 parts Bu2NH in acetone 126, 85% H3PO4 277, and Et3PO4 106 in H2O 1000, and H2O 14,000 parts were added. After distn. of acetone, a 52% opaque, viscous, colloidal I B soln. was obtained. To 586 parts of a 26.6% A soln. at 50.degree. in HCONMe2, 223 parts of a soln. of 89.2 parts 50% aq. B and 133.8 parts HCONMe2 was added and the mixt. adjusted with 191 parts HCONMe2 to 20% solids, heated 1 hr. at 55.degree. with stirring, and cooled. Approx. 200 parts of this soln. were transferred to a 1870 cm.2 glass plate, exposed 20 min. to flowing air of 85% relative humidity, and washed 2 hrs. in H2O to remove HCONMe2. After an addnl. 16 hrs. in H2O, the resulting porous film was exposed for 1 hr. to a 5% aq. soln. of a neutralized com. synthan at 40-50.degree.. The

film was then flushed with H2O, squeezed, and satd. with a 10% nonionic com. emulsion of a methyl polysiloxane oil and dried overnight at 20.degree.. The white film was placed in a 3% Acid Brown 85 dye soln. (C.I. 34,900) at 50.degree. in 5000% H2O and maintained 1 hr. with motion in this bath. Then, 10% of a 60% HCO2H soln. was added, the film let stand 30 min. in the bath, then flushed and dried at 25.degree.. The film had an excellent leatherlike appearance, a good hand, and a H2O-vapor permeability of 19.7 mg./cm.2/hr. The film can also be applied to fabric.